

CLAIMS

1. A magnetic field analysis method comprising the steps
of:

calculating permeance coefficients at multiple sites in
5 a permanent magnet and/or numerical values that are dependent
on the permeance coefficients based on B-H curve data of the
permanent magnet at a first temperature T1; and

deriving modified B-H curve data of the permanent
magnet, which has been operated at a second temperature T2
10 that is different from the first temperature T1, for the
respective sites based on B-H curve data of the permanent
magnet at the second temperature T2 and the permeance
coefficients or the numerical values as stored in the memory
means.

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2. The magnetic field analysis method of claim 1,
comprising the step of deriving the modified B-H curve data
at a third temperature that is different from the second
temperature T2.

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3. The method of claim 1 or 2, further comprising the step of storing the modified B-H curve data in a memory of a calculator.

5 4. A magnetic field analyzer comprising memory means for storing B-H curve data of a selected permanent magnet at multiple temperatures and computing means,

wherein the computing means carries out the steps of:

calculating permeance coefficients at multiple sites in
10 the permanent magnet and/or numerical values that are dependent on the permeance coefficients based on B-H curve data of the permanent magnet at a first temperature T1 as stored in the memory means; and

deriving modified B-H curve data of the permanent
15 magnet, which has been operated at a second temperature T2 that is different from the first temperature T1, for the respective sites based on B-H curve data of the permanent magnet at the second temperature T2 and the permeance coefficients or the numerical values as stored in the memory
20 means.

5. The magnetic field analyzer of claim 1, wherein the computing means stores the modified B-H curve data in the memory means.

5 6. A magnetic field analysis program, which is defined so as to make a computer carry out the steps of:

calculating permeance coefficients at multiple sites in a permanent magnet and/or numerical values that are dependent on the permeance coefficients based on B-H curve data of the
10 permanent magnet at a first temperature T1; and

deriving modified B-H curve data of the permanent magnet, which has been operated at a second temperature T2 that is different from the first temperature T1, for the respective sites based on B-H curve data of the permanent
15 magnet at the second temperature T2 and the permeance coefficients or the numerical values.

7. The magnetic field analysis program of claim 6, which makes the computer carry out the step of deriving the
20 modified B-H curve data at a third temperature that is

different from the second temperature T2.

8. The magnetic field analysis program of claim 6 or 7,
which makes the computer further carry out the step of
5 storing the modified B-H curve data in a memory of a
calculator.

9. An additional module program for magnetic field
analysis, wherein a magnetic field analysis program makes a
10 computer carry out the steps of:

calculating permeance coefficients at multiple sites in
a permanent magnet and/or numerical values that are dependent
on the permeance coefficients based on B-H curve data of the
permanent magnet at a first temperature T1; and then
15 deriving modified B-H curve data of the permanent
magnet, which has been operated at a second temperature T2
that is different from the first temperature T1, for the
respective sites based on B-H curve data of the permanent
magnet at the second temperature T2 and the permeance
20 coefficients or the numerical values.

10. The additional module program for magnetic field analysis of claim 9, which makes the computer carry out the step of deriving the modified B-H curve data at a third temperature that is different from the second temperature T2.

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11. The additional module program for magnetic field analysis of claim 9 or 10, which makes the computer further carry out the step of storing the modified B-H curve data in a memory of a calculator.

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12. A method for producing a magnetic circuit, the method comprising the steps of:

doing a magnetic field analysis on a magnetic circuit, including multiple permanent magnets that have been
15 demagnetized at the second temperature T2, by the magnetic field analysis method of one of claims 1 to 3; and

making the magnetic circuit, including selected one of the permanent magnets, based a result of the magnetic field analysis.